

## CLAIMS

1. A method of indexing video data by the creation of a plurality of scaled-down reference pictures and including the steps of:
  - 5 creating an index file comprising a plurality of compression-encoded reference frames; and
  - adding the plurality of reference pictures creating during recording of the video data to a respective plurality of the said compression – encoded reference frames;
- 10 the compression-encoded reference frames being capable of containing a plurality of reference pictures each created from a plurality of different video recordings.
2. A method as claimed in Claim 1, wherein the index file includes the step  
15 of associating the index file with a database describing the index's layout and content.
3. A method as claimed in Claim 2, wherein the associated database is arranged to define the association between a scaled-down reference picture  
20 sequence and the video data.
4. A method as claimed in Claim 2 or 3, wherein the associated database is provided at the same location as the index file.
- 25 5. A method as claimed in any one or more of Claims 1-4, and including the step of providing a predetermined plurality of compression-encoded reference frames within the index file.
6. A method as claimed in Claim 5, wherein a corresponding plurality of  
30 scaled-down reference pictures are extracted from the video data for addition, in a respective manner, to the plurality of compression-encoded reference frames.

7. A method as claimed in any one or more of Claims 1-6, wherein the plurality of reference pictures are added to the respective plurality of compression-encoded reference frames within the compressed domain.
- 5 8. A method as claimed in any one or more of Claims 1-7, wherein each of the plurality of reference pictures is added to the respective one of the plurality of compression-encoded reference frames at a position depending on the layout of each compression-encoded frame.
- 10 9. A method as claimed in any one or more of Claims 1-7, wherein each of the plurality of reference pictures is added to the respective one of the plurality of compression-encoded reference frames at a position depending on the current content of each compression-encoded frame.
- 15 10. A method as claimed in any one or more of the preceding claims, wherein the compression-encoded reference frames comprise MPEG encoded reference frames.
11. A method as claimed in any one or more of the preceding claims,  
20 wherein the step of the creation of the plurality of scaled-down reference pictures is conducted subsequent to the recording of the video data.
12. A method as claimed in any one or more of the preceding claims, and including the step of displaying a plurality of scaled-down reference picture  
25 sequences as retrieved from the plurality of compression-encoded reference frames.
13. An apparatus for indexing video data by the creation of a plurality of scaled-encoded reference pictures, the apparatus including means for creating  
30 an index file comprising a plurality of compression-encoded reference frames, means for adding the plurality of reference pictures created during recording of the video data to a respective plurality of said compression-encoded reference

frames, the compression-encoded reference frames being capable of containing a plurality of reference pictures each created from a plurality of different video recordings.

5     14.     An apparatus as claimed in Claim 13, wherein the index file includes the step of associating the index file with a database describing the index's layout and content.

15     15.     An apparatus as claimed in Claim 14, wherein the associated database is arranged to define the association between a scaled-down reference picture sequence and the video data.

15     16.     An apparatus as claimed in Claim 14 or 15, wherein the associated database is provided at the same location as the index file.

15     17.     An apparatus as claimed in any one or more of Claims 13-16, and including the step of providing a predetermined plurality of compression-encoded reference frames within the index file.

20     18.     An apparatus as claimed in Claim 17, wherein a corresponding plurality of scaled-down reference pictures are extracted from the video data for addition, in a respective manner, to the plurality of compression-encoded reference frames.

25     19.     An apparatus as claimed in any one or more of Claims 13-17, wherein the plurality of reference pictures are added to the respective plurality of compression-encoded reference frames within the compressed domain.

30     20.     An apparatus as claimed in any one or more of Claims 13-19, wherein each of the plurality of reference pictures is added to the respective one of the plurality of compression-encoded reference frames at a position depending on the layout of each compression-encoded frame.

21. An apparatus as claimed in any one or more of Claims 13-19, wherein each of the plurality of reference pictures is added to the respective one of the plurality of compression-encoded reference frames at a position depending on  
5 the current content of each compression-encoded frame.

22. An apparatus as claimed in any one or more of the preceding claims, wherein the compression-encoded reference frames comprise MPEG encoded reference frames.  
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23. An apparatus as claimed in any one or more of the preceding claims, wherein the step of the creation of the plurality of scaled-down reference pictures is conducted subsequent to the recording of the video data.

15 24. An apparatus as claimed in any one or more of the preceding claims, and including the step of displaying a plurality of scaled-down reference picture sequences as retrieved from the plurality of compression-encoded reference frames.